

W110720005.ST25.txt  
SEQUENCE LISTING

<110> Williams, Kevin J.  
<120> Thrombospondin Fragments and Uses Thereof In Clinical Assays for  
Cancer and Generation of Antibodies and Other Binding Agents  
<130> W1107-20005  
<140> 10/419,462  
<141> 2003-04-21  
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Cys Asn Ser Pro Ser Pro Gln Met Asn Gly Lys Pro Cys Glu Gly Glu  
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Ala Arg

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Pro

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Glu Asp Arg Ala Gln Leu Tyr Ile Asp Cys Glu Lys Met Glu Asn  
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Asp

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Gly Trp Lys Asp Phe Thr Ala Tyr Arg Trp Arg Leu Ser His Arg Pro  
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Lys Thr Gly

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Pro Lys Thr Gly  
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Ile Phe Glu Leu Thr Gly Ala Ala Arg Lys Gly Ser Gly Arg Arg Leu
                               35                               40                               45
Val Lys Gly Pro Asp Pro Ser Ser Pro Ala Phe Arg Ile Glu Asp Ala
                               50                               55                               60
Asn Leu Ile Pro Pro Val Pro Asp Asp Lys Phe Gln Asp Leu Val Asp
 65                               70                               75                               80
Ala Val Arg Ala Glu Lys Gly Phe Leu Leu Leu Ala Ser Leu Arg Gln
                               85                               90                               95
Met Lys Lys Thr Arg Gly Thr Leu Leu Ala Leu Glu Arg Lys Asp His
                               100                               105                               110
Ser Gly Gln Val Phe Ser Val Val Ser Asn Gly Lys Ala Gly Thr Leu
                               115                               120                               125
Asp Leu Ser Leu Thr Val Gln Gly Lys Gln His Val Val Ser Val Glu
                               130                               135                               140
Glu Ala Leu Leu Ala Thr Gly Gln Trp Lys Ser Ile Thr Leu Phe Val
 145                               150                               155                               160
Gln Glu Asp Arg Ala Gln Leu Tyr Ile Asp Cys Glu Lys Met Glu Asn
                               165                               170                               175
Ala Glu Leu Asp Val Pro Ile Gln Ser Val Phe Thr Arg Asp Leu Ala
                               180                               185                               190
Ser Ile Ala Arg Leu Arg Ile Ala Lys Gly Gly Val Asn Asp Asn Phe
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Gln Gly Val Leu Gln Asn Val Arg Phe Val Phe Gly Thr Thr Pro Glu
 210                               215                               220

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 Asn Tyr Ile Gly His Lys Thr Lys Asp Leu Gln Ala Ile Cys Gly Ile  
 260 265 270  
 Ser Cys Asp Glu Leu Ser Ser Met Val Leu Glu Leu Arg Gly Leu Arg  
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 Thr Ile Val Thr Thr Leu Gln Asp Ser Ile Arg Lys Val Thr Glu Glu  
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 Asn Gly Val Gln Tyr Arg Asn Asn Glu Glu Trp Thr Val Asp Ser Cys  
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 Thr Glu Cys His Cys Gln Asn Ser Val Thr Ile Cys Lys Lys Val Ser  
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 405 410 415  
 Ser Val Gln Thr Arg Thr Cys His Ile Gln Glu Cys Asp Lys Arg Phe  
 420 425 430  
 Lys Gln Asp Gly Gly Trp Ser His Trp Ser Pro Trp Ser Ser Cys Ser  
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 Val Thr Cys Gly Asp Gly Val Ile Thr Arg Ile Arg Leu Cys Asn Ser  
 450 455 460  
 Pro Ser Pro Gln Met Asn Gly Lys Pro Cys Glu Gly Glu Ala Arg Glu  
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Thr Lys Ala Cys Lys 485 Lys Asp Ala Cys Pro 490 Ile Asn Gly Gly Trp 495 Gly  
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 Lys Asp 530 Cys Val Gly Asp Val 535 Thr Glu Asn Gln 540 Ile Cys Asn Lys Gln  
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 Lys Cys Thr Ser Tyr 565 Pro Asp Gly Ser Trp 570 Lys Cys Gly Ala Cys 575 Pro  
 Pro Gly Tyr Ser 580 Gly Asn Gly Ile Gln 585 Cys Thr Asp Val Asp 590 Glu Cys  
 Lys Glu Val 595 Pro Asp Ala Cys Phe 600 Asn His Asn Gly Glu 605 His Arg Cys  
 Glu Asn 610 Thr Asp Pro Gly Tyr 615 Asn Cys Leu Pro Cys 620 Pro Pro Arg Phe  
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 Cys Asn Lys Asn 660 Ala Lys Cys Asn Tyr 665 Leu Gly His Tyr Ser 670 Asp Pro  
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 Cys Gly Glu Asp Thr Asp Leu 695 Asp Gly Trp Pro Asn 700 Glu Asn Leu Val  
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 770 775 780  
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 Ile Asp Gly Asp Gly Ile Leu Asn Glu Arg Asp Asn Cys Gln Tyr Val  
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 Tyr Asn Val Asp Gln Arg Asp Thr Asp Met Asp Gly Val Gly Asp Gln  
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 Cys Asp Asn Cys Pro Leu Glu His Asn Pro Asp Gln Leu Asp Ser Asp  
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 Ser Asp Arg Ile Gly Asp Thr Cys Asp Asn Asn Gln Asp Ile Asp Glu  
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 Asp Gly His Gln Asn Asn Leu Asp Asn Cys Pro Tyr Val Pro Asn Ala  
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 Asn Gln Ala Asp His Asp Lys Asp Gly Lys Gly Asp Ala Cys Asp His  
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 Asp Asp Asp Asn Asp Gly Ile Pro Asp Asp Lys Asp Asn Cys Arg Leu  
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 Val Pro Asn Pro Asp Gln Lys Asp Ser Asp Gly Asp Gly Arg Gly Asp  
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 Ala Cys Lys Asp Asp Phe Asp His Asp Ser Val Pro Asp Ile Asp Asp  
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 Ile Cys Pro Glu Asn Val Asp Ile Ser Glu Thr Asp Phe Arg Arg Phe  
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 Gln Met Ile Pro Leu Asp Pro Lys Gly Thr Ser Gln Asn Asp Pro Asp  
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Trp Val Val Arg His Gln Gly Lys Glu Leu Val Gln Thr Val Asn Cys  
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Asp Pro Gly Leu Ala Val Gly Tyr Asp Glu Phe Asn Ala Val Asp Phe  
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Ser Gly Thr Phe Phe Ile Asn Thr Glu Arg Asp Asp Asp Tyr Ala  
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Gly Phe Val Phe Gly Tyr Gln Ser Ser Ser Arg Phe Tyr Val Val  
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Met Trp Lys Gln Val Thr Gln Ser Tyr Trp Asp Thr Asn Pro Thr  
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Arg Ala Gln Gly Tyr Ser Gly Leu Ser Val Lys Val Val Asn Ser  
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Thr Thr Gly Pro Gly Glu His Leu Arg Asn Ala Leu Thr His Thr  
 1070 1075 1080

Gly Asn Thr Pro Gly Gln Val Arg Thr Leu Trp His Asp Pro Arg  
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His Ile Gly Trp Lys Asp Phe Thr Ala Tyr Arg Trp Arg Leu Ser  
 1100 1105 1110

His Arg Pro Lys Thr Gly Phe Ile Arg Val Val Met Tyr Glu Gly  
 1115 1120 1125

Lys Lys Ile Met Ala Asp Ser Gly Pro Ile Tyr Asp Lys Thr Tyr  
 1130 1135 1140

Ala Gly Gly Arg Leu Gly Leu Phe Val Phe Ser Gln Glu Met Val  
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Phe Phe Ser Asp Leu Lys Tyr Glu Cys Arg Asp Pro  
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Gly Thr

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Glu Leu Thr Gly Ala Ala Arg Lys Gly Ser Gly Arg Arg Leu Val Lys  
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Gly Pro Asp Pro Ser Ser Pro Ala Phe Arg Ile Glu Asp Ala Asn Leu  
 35 40 45

Ile Pro Pro Val Pro Asp Asp Lys Phe Gln Asp Leu Val Asp Ala Val  
 50 55 60

Arg Ala Glu Lys Gly Phe Leu Leu Leu Ala Ser Leu Arg Gln Met Lys  
 65 70 75 80

Lys Thr Arg Gly Thr Leu Leu Ala Leu Glu Arg Lys Asp His Ser Gly  
 85 90 95

Gln Val Phe Ser Val Val Ser Asn Gly Lys Ala Gly Thr Leu Asp Leu  
 100 105 110

Ser Leu Thr Val Gln Gly Lys Gln His Val Val Ser Val Glu Glu Ala  
 115 120 125

Leu Leu Ala Thr Gly Gln Trp Lys Ser Ile Thr Leu Phe Val Gln Glu  
 130 135 140

Asp Arg Ala Gln Leu Tyr Ile Asp Cys Glu Lys Met Glu Asn Ala Glu  
 145 150 155 160

Leu Asp Val Pro Ile Gln Ser Val Phe Thr Arg Asp Leu Ala Ser Ile  
 165 170 175

Ala Arg Leu Arg Ile Ala Lys Gly Gly Val Asn Asp Asn Phe Gln Gly  
 180 185 190

Val Leu Gln Asn Val Arg Phe Val Phe Gly Thr Thr Pro Glu Asp Ile  
195 200 205

Leu Arg Asn Lys Gly Cys Ser Ser Ser Thr Ser Val Leu Leu Thr Leu  
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Asp Asn Asn Val Val Asn Gly Ser Ser Pro Ala Ile Arg Thr Asn Tyr  
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Asp Glu Leu Ser Ser Met  
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Ser Ile Arg Lys Val Thr Glu Glu Asn Lys Glu Leu Ala Asn Glu Leu  
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Arg Arg Pro Pro Leu Cys Tyr His Asn Gly Val Gln Tyr Arg Asn Asn  
35 40 45

Glu Glu Trp Thr Val Asp Ser Cys Thr Glu Cys His Cys Gln Asn Ser  
50 55 60

Val Thr Ile Cys Lys Lys Val Ser Cys Pro Ile Met Pro Cys Ser Asn  
65 70 75 80

Ala Thr Val Pro Asp Gly Glu Cys Cys Pro Arg Cys Trp Pro Ser Asp  
Page 16



Ser Ala

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 35 40 45

Glu Cys Asp Lys Arg Phe Lys Gln Asp Gly Gly Trp Ser His Trp Ser  
 50 55 60

Pro Trp Ser Ser Cys Ser Val Thr Cys Gly Asp Gly Val Ile Thr Arg  
 65 70 75 80

Ile Arg Leu Cys Asn Ser Pro Ser Pro Gln Met Asn Gly Lys Pro Cys  
 85 90 95

Glu Gly Glu Ala Arg Glu Thr Lys Ala Cys Lys Lys Asp Ala Cys Pro  
 100 105 110

Ile Asn Gly Gly Trp Gly Pro Trp Ser Pro Trp Asp Ile Cys Ser Val  
 115 120 125

Thr Cys Gly Gly Gly Val Gln Lys Arg Ser Arg Leu Cys Asn Asn Pro  
 130 135 140

Ala Pro Gln Phe Gly Gly Lys Asp Cys Val Gly Asp Val Thr Glu Asn  
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35     40     45
Asp Ala Cys Phe Asn His Asn Gly Glu His Arg Cys Glu Asn Thr Asp
50     55     60
Pro Gly Tyr Asn Cys Leu Pro Cys Pro Pro Arg Phe Thr Gly Ser Gln
65     70     75     80
Pro Phe Gly Gln Gly Val Glu His Ala Thr Ala Asn Lys Gln Val Cys
85     90     95
Lys Pro Arg Asn Pro Cys Thr Asp Gly Thr His Asp Cys Asn Lys Asn
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Glu Cys Lys Pro Gly Tyr Ala Gly Asn Gly Ile Ile Cys Gly Glu
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Asp Gly Ile Gly Asp Ala Cys Asp Asp Asp Asp Asn Asp Lys Ile  
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Pro Asp Asp Arg  
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Asp Asp Val Gly Asp Arg Cys  
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Asn Gly Glu Gly Asp Ala Cys Ala Ala Asp Ile Asp Gly Asp Gly Ile  
 20 25 30

Leu Asn Glu Arg  
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Asp Gly Val Gly Asp Gln Cys  
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Gly His Gln Asn Asn Leu  
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Asp Gly Lys Gly Asp Ala Cys Asp His Asp Asp Asp Asn Asp Gly Ile  
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Pro Asp Asp Lys  
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Pro Asp Ile Asp  
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20 25 30

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35 40 45

Cys Asp Pro Gly Leu Ala Val Gly Tyr Asp Glu Phe Asn Ala Val Asp  
50 55 60

Phe Ser Gly Thr Phe Phe Ile Asn Thr Glu Arg Asp Asp Asp Tyr Ala  
65 70 75 80

Gly Phe Val Phe Gly Tyr Gln Ser Ser Ser Arg Phe Tyr Val Val Met  
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Trp Lys Gln Val Thr Gln Ser Tyr Trp Asp Thr Asn Pro Thr Arg Ala  
100 105 110

Gln Gly Tyr Ser Gly Leu Ser Val Lys Val Val Asn Ser Thr Thr Gly  
115 120 125

Pro Gly Glu His Leu Arg Asn Ala Leu Trp His Thr Gly Asn Thr Pro  
Page 21

130

135

Gly Gln Val Arg Thr Leu Trp His Asp Pro Arg His Ile Gly Trp Lys  
145 150 155 160

Asp Phe Thr Ala Tyr Arg Trp Arg Leu Ser His Arg Pro Lys Thr Gly  
165 170 175

Phe Ile Arg Val Val Met Tyr Glu Gly Lys Lys Ile Met Ala Asp Ser  
180 185 190

Gly Pro Ile Tyr Asp Lys Thr Tyr Ala Gly Gly Arg Leu Gly Leu Phe  
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Val Phe Ser Gln Glu Met Val Phe Phe Ser Asp Leu Lys Tyr Glu Cys  
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Arg Asp Pro  
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Cys Ser Val Thr Cys Gly  
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Ile Arg Val Val Met  
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Arg Lys Gly Ser Gly Arg Arg Leu Val Lys  
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Ala Arg Lys Gly Ser Gly Arg Arg  
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Met Lys Lys Thr Arg Gly  
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Arg Leu Arg Ile Ala Lys Gly Gly Val Asn Asp Asn  
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